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- 47. The cosmetic preparation as defined in claim 43, having a gel structure formed by said at least one superabsorbing polymer.
- 48. The cosmetic preparation as defined in claim 43, wherein the at least one superabsorbing polymer is selected from the group consisting of at least partially neutralized cross-linked superabsorbing polyacrylic acids, at least partially neutralized cross-linked superabsorbing polymethacrylic acids and superabsorbing graft copolymers of starch and acrylic acid.

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- 49. The cosmetic preparation as defined in claim 43, wherein, before water absorption, the at least one superabsorbing polymer has an average particle size from 100 to 850  $\mu m$ .
- 50. The cosmetic preparation as defined in claim 49, wherein said average particle size is less than 200  $\mu m$ .
- 51. The cosmetic preparation as defined in claim 43, wherein the at least one superabsorbing polymer has a water absorption capacity for demineralized water of at least 20 g/g.

- 52. The cosmetic preparation as defined in claim 43, further comprising at least one second polymer selected from the group consisting of hair-fixing polymers and hair-care polymers.
- 53. The cosmetic preparation as defined in claim 43, wherein said at least one second polymer is at least one film-forming, hair-fixing nonionic polymers.

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- 54. The cosmetic preparation as defined in claim 43, wherein said at least one second polymer is polyvinyl pyrrolidone, polyvinyl caprolactam, a copolymer of polyvinyl pyrrolidone with at least one additional nonionic monomer or a copolymer of polyvinyl caprolactam with at least one additional nonionic monomer.
- 55. The cosmetic preparation as defined in claim 52, containing from 0.05 to 20 percent by weight of the at least one superabsorbing polymer.
- 56. The cosmetic preparation as defined in claim 52, containing from 0.1 to 30 percent by weight of said at least one second polymer.
- 57. The cosmetic preparation as defined in claim 43, consisting of a hair care gel.
- 58. The cosmetic preparation as defined in claim 43, consisting of a hair fixing gel.

59. The cosmetic preparation as defined in claim 43, further comprising a foil or paper for wrapping hair ends, and wherein said foil or said paper is impregnated or coated with said gel including said undissolved water-swollen particles of said at least one superabsorbing polymer.

- 60. A method of protecting hair ends during a permanent wave treatment of hair, said method comprising the steps of:
- a) providing a gel comprising undissolved water-swollen particles of at least one superabsorbing polymer;
  - b) applying the gel of step a) to the hair ends to be protected; and
- c) after the applying of the gel in step b), performing the permanent wave treatment.
- 61. The method as defined in claim 60, wherein the undissolved water-swollen particles of the at least one superabsorbing polymer have average diameters of not greater than 2000  $\mu m$ .
- 62. The method as defined in claim 61, wherein said average diameters are from 40 to 1400  $\mu m$ .
- 63. The method as defined in claim 60, wherein the at least one superabsorbing polymer is selected from the group consisting of at least partially neutralized cross-linked superabsorbing polyacrylic acids, at least partially neutralized cross-

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linked superabsorbing polymethacrylic acids and superabsorbing graft copolymers of starch and acrylic acid.

64. The method as defined in claim 60, wherein, before water absorption, the at least one superabsorbing polymer has an average particle size from 100 to 850  $\mu m$ .



- 65. The method as defined in claim 64, wherein said average particle size is less than 200  $\mu m$ .
- 66. The method as defined in claim 60, wherein said at least one superabsorbing polymer has a water absorption capacity for demineralized water of at least 20 g/g.
- 67. The method as defined in claim 60, containing from 0.1 to 5 percent by weight of said at least one superabsorbing polymer.
- 68. A method for permanent shaping of hair, said method comprising the steps of:
- a) providing a gel comprising undissolved water-swollen particles of at least one superabsorbing polymer;
  - b) putting the hair in a desired shape;

- c) at least one of before and after putting the hair in the desired shape, applying a shaping agent to the hair;
- d) before the hair is treated with the shaping agent in step c), treating the hair with the gel provided in step a);
- e) rinsing the hair with water after the applying of the shaping agent to the hair;
- f) oxidatively post-treating the hair after the applying of the shaping agent to the hair;
- g) again rinsing the hair and optionally arranging the hair in a water wave; and

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- h) then drying the hair.
- 69. The method as defined in claim 68, wherein the undissolved water-swollen particles of the at least one superabsorbing polymer have average diameters of not greater than 2000  $\mu m$ .
- 70. The method as defined in claim 69, wherein said average diameters are from 40 to 1400  $\mu m$ .
- 71. The method as defined in claim 68, wherein the at least one superabsorbing polymer is selected from the group consisting of at least partially neutralized cross-linked superabsorbing polyacrylic acids, at least partially neutralized cross-

linked superabsorbing polymethacrylic acids and superabsorbing graft copolymers of starch and acrylic acid.

- 72. The method as defined in claim 68, wherein, before water absorption, the at least one superabsorbing polymer has an average particle size from 100 to 850  $\mu m$ .
- 73. The method as defined in claim 72, wherein said average particle size is less than 200  $\mu m$ .
- 74. The method as defined in claim 68, wherein said at least one superabsorbing polymer has a water absorption capacity for demineralized water of at least 20 g/g.
- 75. The method as defined in claim 68, containing from 0.1 to 5 percent by weight of said at least one superabsorbing polymer.

## REMARKS

Applicants <u>provisionally elect</u> the Group I claims drawn to hair treatment preparations and cosmetic gel compositions, as well as methods of using the compositions and preparations.

All the original claims 22 to 40 have been canceled without prejudice. No